

## Concept Note

# Symposium on Integrated Management of Air Pollution to Respond to Climate Change

September 4, 2025

Conference Room 301, Kintex 2, Ilsan, Republic of Korea

## Background

Air pollution and climate change are closely interconnected, sharing common sources and mitigation pathways. Actions to reduce air pollutants can - contribute significantly to climate change mitigation - particularly when focused on upstream and systemic solutions such as clean energy transitions and sustainable transport. However, certain end-of-pipe measures may have unintended consequences, including increased energy use or the removal of cooling aerosols like sulfur, which could unmask against warming.

Recognizing the importance of designing integrated strategies that maximize co-benefits while minimizing trade-offs, the Symposium will bring together policy makers, scientists, international organizations, and technical experts to promote holistic approaches that respond to both air pollution and climate change challenges.

The Symposium is jointly organized by the United Nations ESCAP Subregional Office for East and North-East Asia, in its capacity as the secretariat of the North-East Asian Subregional Programme for Environmental Cooperation (NEASPEC), and the National Air Emission Inventory and Research Center (NAIRC) of the Republic of Korea, which serves as a Technical Centre for the North-East Asia Clean Air Partnership (NEACAP) - a flagship programme under NEASPEC. This event aims to strengthen international cooperation, share national experiences, and explore innovative, evidence-based solutions for integrated environmental management.

## Objectives

- Emphasize the co-benefits of integrated air pollution control and climate change

mitigation, while recognizing potential unintended impacts of certain technologies or strategies.

- Share scientific knowledge and policy experiences related to short lived climate pollutants (SLCPs) – including black carbon-, and wildfire-related air pollution.
- Promote international cooperation, technological innovation, and interdisciplinary approaches for sustainable air quality and climate strategies.
- Facilitate dialogue on policy packages that utilize the synergies across air quality, health, and climate goals in a mutually reinforcing manner.

### Organizers

- United Nations ESCAP Subregional Office for North-East Asia
- National Air Emission Inventory and Research Center (NAIR), Ministry of Environment, Republic of Korea

### Expected Outcomes

- Enhanced understanding of integrated approaches targeting both air pollution and climate change.
- Shared national experiences on wildfire management and SLCP reduction.
- Strengthened partnership among participating countries, international organizations, and research institutions.
- Practical recommendations for advancing integrated air quality and climate strategies at national and regional levels.

### Proposed Sessions

#### **Session 1: Linkage between Climate Change and Air Pollution**

This session will explore the complex interlinkages between climate change and air pollution, emphasizing the importance of integrated management approaches that account for both synergies and trade-offs. International organizations and leading experts will present recent findings on how air pollution control measures can support climate goals. The session will promote a systems-thinking approach and discuss the implications of designing effective and balanced policy packages.

#### **Session 2: National Responses to Air Pollution from Climate-Driven Events**

This session will introduce national efforts to manage air pollution stemming from climate change-related events, such as wildfires, dust storms, and extreme weather incidents. Case studies will be shared by countries experiencing severe impacts,

highlighting wildfire smoke management, black carbon mitigation, and broader approaches to controlling air pollution exacerbated by climate extremes.

### **Session 3: Innovative Approaches and Multi-stakeholder Cooperation for Integrated Management of Climate Change and Air Pollution**

This session will highlight forward-looking approaches to integrating air quality and climate policies. Discussion will feature co-benefits approaches, digital technologies, and policy innovations enabled through international and multi-stakeholder cooperation. The session will promote actionable strategies for coordinated governance, inclusive policy development, and sustainable international collaboration to address shared air and climate challenges.

#### **Provisional Programme**

| <b>Time</b> | <b>Programme</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
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| 09:00-09:30 | Registration                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 09:30-09:50 | <b>Opening and congratulatory remarks:</b> <ul style="list-style-type: none"> <li>• <b>Ms. Heun-jin Oh</b>, Head, National Air Emission Inventory and Research Center, Republic of Korea</li> <li>• <b>Mr. Ganbold Baasanjav</b>, Head, UNESCAP East and North-East Asia Office</li> <li>• <b>Mr. Ki-moon Ban</b>, Chairman, Ban Ki-moon Foundation for a Better Future (Video message)</li> </ul>                                                                                                              |
| 9:50-11:20  | <b>Session 1. Linkage between Climate Change and Air Pollution</b> <ul style="list-style-type: none"> <li>• <b>Mr. Sangmin Nam</b>, Director, Environment and Development Division, UNESCAP</li> <li>• <b>Mr. Sang-wook Yeh</b>, Professor, Hanyang University</li> <li>• <b>Ms. Wei Wan</b>, Acting China Director, Clean Air Asia (online)</li> </ul> <b>Q &amp; A</b>                                                                                                                                        |
| 11:20-11:40 | Break                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 11:40-13:00 | <b>Session 2. National Responses to Air Pollution from Climate-Driven Events</b> <ul style="list-style-type: none"> <li>• <b>Ms. Seungmin Lee</b>, Director, Division for Atmospheric Environment, Korea Environment Institute</li> <li>• <b>Ms. Gantuya Ganbat</b>, Assistant Professor, German-Mongolian Institute for Resources and Technology, Mongolia</li> <li>• <b>Mr. Philippe Ciais</b>, Research Director, Laboratoire des Sciences du Climat et de l'Environnement(LSCE), France (online)</li> </ul> |

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|             | <ul style="list-style-type: none"> <li>• <b>Mr. Israr Albar</b>, Deputy Director, Directorate of Forest Fire Management, Ministry of Forestry, Indonesia (online)</li> </ul> <p><b>Q &amp; A</b></p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 13:00-15:00 | Lunch                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 15:00-16:30 | <p><b>Session 3. Innovative Approaches and Multi-stakeholder Cooperation for Integrated Management of Climate Change and Air Pollution</b></p> <ul style="list-style-type: none"> <li>• <b>Mr. Jung-hun Woo</b>, Professor, Seoul National University</li> <li>• <b>Mr. Eric Zusman</b>, Senior Policy Researcher/ Area Leader, Institute for Global Environmental Strategies (IGES) (online)</li> <li>• <b>Ms. Lara Aleluia Reis</b>, Scientist, Euro-Mediterranean Center on Climate Change (CMCC) (online)</li> <li>• <b>Ms. Kessinee Unapumnuk</b>, Environmentalist, Senior Professional Level, Air Quality and Noise Management Division, Pollution Control Department, Thailand</li> </ul> <p><b>Q &amp; A</b></p> |
| 16:30-17:00 | <p><b>Closing Remarks</b></p> <ul style="list-style-type: none"> <li>• <b>Mr. Juhong, Kang</b>, Director General of Office for Clean Air, Office for Government Policy Coordination</li> <li>• <b>Ms. Gantuya Ganbat</b>, Chair of the Science and Policy Committee of NEACAP and Assistant Professor, German-Mongolian Institute for Resources and Technology, Mongolia</li> </ul>                                                                                                                                                                                                                                                                                                                                       |